

SEQUENCE SUBMISSION

SEQ ID NO: 1 provides primate IL-1 δ nucleotide sequence.
 SEQ ID NO: 2 provides primate IL-1 δ polypeptide sequence.
 5 SEQ ID NO: 3 provides primate IL-1 ϵ nucleotide sequence.
 SEQ ID NO: 4 provides primate IL-1 ϵ polypeptide sequence.
 SEQ ID NO: 5 provides primate IL-1 α polypeptide sequence.
 SEQ ID NO: 6 provides primate IL-1 β polypeptide sequence.
 10 SEQ ID NO: 7 provides primate IL-1RA polypeptide sequence.
 SEQ ID NO: 8 provides rodent IL-1 γ (IGIF) polypeptide sequence.
 SEQ ID NO: 9 provides primate IL-1 γ (IGIF) polypeptide sequence.
 SEQ ID NO: 10 provides rodent IL-1 ϵ polypeptide sequence.
 SEQ ID NO: 11 provides rodent IL-1 δ polypeptide sequence.
 15 SEQ ID NO: 12 provides primate IL-1R6 nucleotide sequence.
 SEQ ID NO: 13 provides primate IL-1R6 polypeptide sequence.
 SEQ ID NO: 14 provides rodent IL-1R6 nucleotide sequence.
 SEQ ID NO: 15 provides rodent IL-1R6 polypeptide sequence.

20 <110> Debets, Johannes E.M.A.
 Timans, Jacqueline C.
 Bazan, J. Fernando
 Kastelein, Robert A.

25 <120> Mammalian Cytokines; Receptors; Related Reagents and
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35 <170> PatentIn Ver. 2.1
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 Homo sapiens

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 <222> (58)..(522)

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 Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly Leu His
 20 25 30

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gca ggg aag gtc att aaa ggt gaa gag atc agc gtg gtc ccc aat cgg 201
 Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg
 35 40 45

5 tgg ctg gat gcc agc ctg tcc ccc gtc atc ctg ggt gtc cag ggt gga 249
 Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly
 50 55 60

10 agc cag tgc ctg tca tgt ggg gtg ggg cag gag ccg act cta aca cta 297
 Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu
 65 70 75 80

15 gag cca gtg aac atc atg gag ctc tat ctt ggt gcc aag gaa tcc aag 345
 Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys
 85 90 95

20 agc ttc acc ttc tac cgg cgg gac atg ggg ctc acc tcc agc ttc gag 393
 Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe Glu
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 Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Val Pro Glu Ala Asp
 115 120 125

30 cag cct gtc aga ctc acc cag ctt ccc gag aat ggt ggc tgg aat gcc 489
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 130 135 140

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 145 150 155

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45 tcaactctctc tgctctcagg acccccacgt ctgacttagt gggcacctga ccactttgtc 662

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45 gggtcagtag ctctccacat gaagtctgt cactcaccac tgtgcaggaa gggaaggtgg 962

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55 <213> Unknown Organism
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 Homo sapiens

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 Tyr Pro Glu Ala Leu Glu Gln Gly Arg Gly Asp Pro Ile Tyr Leu Gly
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atc cag aat cca gaa atg tgt ttg tat tgt gag aag gtt gga gaa cag 348
 Ile Gln Asn Pro Glu Met Cys Leu Tyr Cys Glu Lys Val Gly Glu Gln
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ccc aca ttg cag cta aaa gag cag aag atc atg gat ctg tat ggc caa 396
 Pro Thr Leu Gln Leu Lys Glu Gln Lys Ile Met Asp Leu Tyr Gly Gln
 95 100 105 110

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ccc gag ccc gtg aaa ccc ttc ctt ttc tac cgt gcc aag act ggt agg 444
 Pro Glu Pro Val Lys Pro Phe Leu Phe Tyr Arg Ala Lys Thr Gly Arg
 115 120 125

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acc tcc acc ctt gag tct gtg gcc ttc ccg gac tgg ttc att gcc tcc 492
 Thr Ser Thr Leu Glu Ser Val Ala Phe Pro Asp Trp Phe Ile Ala Ser
 130 135 140

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tcc aag aga gac cag ccc atc att ctg act tca gaa ctt ggg aag tca 540
 Ser Lys Arg Asp Gln Pro Ile Ile Leu Thr Ser Glu Leu Gly Lys Ser
 145 150 155

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tac aac act gcc ttt gaa tta aat ata aat gac tgaactcagc ctagagggtgg 593
 Tyr Asn Thr Ala Phe Glu Leu Asn Ile Asn Asp
 160 165

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cagcttggtc tttgtcttaa agtttctggt tcccaatgtg ttttcgtcta cattttctta 653
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gaagatgctt cagagctcat gcgcgttacc cacgatggca tgactagcac agagctgac 953
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 Homo sapiens

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Gln Val Trp Thr Leu Gln Gly Gln Asn Leu Val Ala Val Pro Arg Ser

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Asp Ser Val Thr Pro Val Thr Val Ala Val Ile Thr Cys Lys Tyr Pro
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5  Glu Ala Leu Glu Gln Gly Arg Gly Asp Pro Ile Tyr Leu Gly Ile Gln
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10 Asn Pro Glu Met Cys Leu Tyr Cys Glu Lys Val Gly Glu Gln Pro Thr
      85              90              95
    Leu Gln Leu Lys Glu Gln Lys Ile Met Asp Leu Tyr Gly Gln Pro Glu
      100              105              110
15 Pro Val Lys Pro Phe Leu Phe Tyr Arg Ala Lys Thr Gly Arg Thr Ser
      115              120              125
    Thr Leu Glu Ser Val Ala Phe Pro Asp Trp Phe Ile Ala Ser Ser Lys
      130              135              140
20 Arg Asp Gln Pro Ile Ile Leu Thr Ser Glu Leu Gly Lys Ser Tyr Asn
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      20              25              30
45 Asn Leu Asp Glu Ala Val Lys Phe Asp Met Gly Ala Tyr Lys Ser Ser
      35              40              45
    Lys Asp Asp Ala Lys Ile Thr Val Ile Leu Arg Ile Ser Lys Thr Gln
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50 Leu Tyr Val Thr Ala Gln Asp Glu Asp Gln Pro Val Leu Leu Lys Glu
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    Met Pro Glu Ile Pro Lys Thr Ile Thr Gly Ser Glu Thr Asn Leu Leu
      85              90              95
    Phe Phe Trp Glu Thr His Gly Thr Lys Asn Tyr Phe Thr Ser Val Ala
      100              105              110
60 His Pro Asn Leu Phe Ile Ala Thr Lys Gln Asp Tyr Trp Val Cys Leu
      115              120              125

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15 <220>
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35 40 45

Gly Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu
50 55 60

Lys Asn Leu Tyr Leu Ser Cys Val Leu Lys Asp Asp Lys Pro Thr Leu
65 70 75 80

35 Gln Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Lys Met Glu
 85 90 95

Lys Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe
100 105 110

40 Glu Ser Ala Gln Phe Pro Asn Trp Tyr Ile Ser Thr Ser Gln Ala Glu
 115 120 125

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 Homo sapiens

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 35 40 45
 His Ala Leu Phe Leu Gly Ile His Gly Gly Lys Met Cys Leu Ser Cys
 50 55 60
 10 Val Lys Ser Gly Asp Glu Thr Arg Leu Gln Leu Glu Ala Val Asn Ile
 65 70 75 80
 Thr Asp Leu Ser Glu Asn Arg Lys Gln Asp Lys Arg Phe Ala Phe Ile
 85 90 95
 15 Arg Ser Asp Ser Gly Pro Thr Thr Ser Phe Glu Ser Ala Ala Cys Pro
 100 105 110
 20 Gly Trp Phe Leu Cys Thr Ala Met Glu Ala Asp Gln Pro Val Ser Leu
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 <213> Unknown Organism
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 45 Thr Asp Ile Asp Gln Ser Ala Ser Glu Pro Gln Thr Arg Leu Ile Ile
 35 40 45
 Tyr Met Tyr Lys Asp Ser Glu Val Arg Gly Leu Ala Val Thr Leu Ser
 50 55 60
 Val Lys Asp Ser Lys Met Ser Thr Leu Ser Cys Lys Asn Lys Ile Ile
 65 70 75 80
 55 Ser Phe Glu Glu Met Asp Pro Pro Glu Asn Ile Asp Asp Ile Gln Ser
 85 90 95
 Asp Leu Ile Phe Phe Gln Lys Arg Val Pro Gly His Asn Lys Met Glu
 100 105 110
 60 Phe Glu Ser Ser Leu Tyr Glu Gly His Phe Leu Ala Cys Gln Lys Glu

115 120 125

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10 <210> 9
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<213> Unknown Organism

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Homo sapiens

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30 Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile
35 40 45

Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile
50 55 60

35 Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys Glu Asn Lys Ile
65 70 75 80

Ile Ser Phe Lys Glu Met Asn Pro Pro Asp Asn Ile Lys Asp Thr Lys
85 90 95

40 Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly His Asp Asn Lys
100 105 110

Met Gln Phe Glu Ser Ser Ser Tyr Glu Gly Tyr Phe Leu Ala Cys Glu
115 120 125

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 Homo sapiens

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gtc aca gca gat gga tgc aag gac att ttt atg aaa aat gag ata ctt 96
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tca gca agc cag cct ttt gct ttt aat tgt aca ttc cct ccc ata aca 144
 Ser Ala Ser Gln Pro Phe Ala Phe Asn Cys Thr Phe Pro Pro Ile Thr
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40

tct ggg gaa gtc agt gta aca tgg tat aaa aat tct agc aaa atc cca 192
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gtg tcc aaa atc ata cag tct aga att cac cag gac gag act tgg att 240
 Val Ser Lys Ile Ile Gln Ser Arg Ile His Gln Asp Glu Thr Trp Ile
 65 70 75 80

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ttg ttt ctc ccc atg gaa tgg ggg gac tca gga gtc tac caa tgt gtt 288
 Leu Phe Leu Pro Met Glu Trp Gly Asp Ser Gly Val Tyr Gln Cys Val
 85 90 95

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ata aag ggt aga gac agc tgt cat aga ata cat gta aac cta act gtt 336
 Ile Lys Gly Arg Asp Ser Cys His Arg Ile His Val Asn Leu Thr Val
 100 105 110

ttt gaa aaa cat tgg tgt gac act tcc ata ggt ggt tta cca aat tta 384
 Phe Glu Lys His Trp Cys Asp Thr Ser Ile Gly Gly Leu Pro Asn Leu
 115 120 125

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 Ser Asp Glu Tyr Lys Gln Ile Leu His Leu Gly Lys Asp Asp Ser Leu
 130 135 140

aca tgt cat ctg cac ttc ccg aag agt tgt gtt ttg ggt cca ata aag 480

1689 51092260

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10	tgt gga tat aag ttg ttt ata ttc ggc aga gat gaa ttc cct gga caa Cys Gly Tyr Lys Leu Phe Ile Phe Gly Arg Asp Glu Phe Pro Gly Gln	420	425	430	1296
15	gcc gtg gcc aat gtc atc gat gaa aac gtt aag ctg tgc agg agg ctg Ala Val Ala Asn Val Ile Asp Glu Asn Val Lys Leu Cys Arg Arg Leu	435	440	445	1344
20	att gtc att gtg gtc ccc gaa tcg ctg ggc ttt ggc ctg ttg aag aac Ile Val Ile Val Val Pro Glu Ser Leu Gly Phe Gly Leu Leu Lys Asn	450	455	460	1392
25	ctg tca gaa gaa caa atc gcg gtc tac agt gcc ctg atc cag gac ggg Leu Ser Glu Glu Gln Ile Ala Val Tyr Ser Ala Leu Ile Gln Asp Gly	465	470	475	1440
30	atg aag gtt att ctc att gag ctg gag aaa atc gag gac tac aca gtc Met Lys Val Ile Leu Ile Glu Leu Glu Lys Ile Glu Asp Tyr Thr Val	485	490	495	1488
35	atg cca gag tca att cag tac atc aaa cag aag cat ggt gcc atc cgg Met Pro Glu Ser Ile Gln Tyr Ile Lys Gln Lys His Gly Ala Ile Arg	500	505	510	1536
40	tgg cat ggg gac ttc acg gag cag tca cag tgt atg aag acc aag ttt Trp His Gly Asp Phe Thr Glu Gln Ser Gln Cys Met Lys Thr Lys Phe	515	520	525	1584
45	tgg aag aca gtg aga tac cac atg ccg ccc aga agg tgt cgg ccg ttt Trp Lys Thr Val Arg Tyr His Met Pro Pro Arg Cys Arg Pro Phe	530	535	540	1632
50	ctc cgg tcc acg tgc cgc agc aca cac ctc tgt acc gca ccg cag gcc Leu Arg Ser Thr Cys Arg Ser Thr His Leu Cys Thr Ala Pro Gln Ala	545	550	555	1680
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107023 5057260


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Ser Ala Phe His Ser Thr Glu Thr Ile Val Asp Gly Lys Leu Tyr Asp
 370                               375                 380
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Val Asp Ala Leu Val Leu Asn Ile Leu Pro Glu Val Leu Glu Arg Gln
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10 Cys Gly Tyr Lys Leu Phe Ile Phe Gly Arg Asp Glu Phe Pro Gly Gln
    420                               425                 430

Ala Val Ala Asn Val Ile Asp Glu Asn Val Lys Leu Cys Arg Arg Leu
15   435                               440                 445

Ile Val Ile Val Val Pro Glu Ser Leu Gly Phe Gly Leu Leu Lys Asn
   450                               455                 460

20 Leu Ser Glu Glu Gln Ile Ala Val Tyr Ser Ala Leu Ile Gln Asp Gly
   465                               470                 475                   480

Met Lys Val Ile Leu Ile Glu Leu Glu Lys Ile Glu Asp Tyr Thr Val
25   485                               490                 495

Met Pro Glu Ser Ile Gln Tyr Ile Lys Gln Lys His Gly Ala Ile Arg
    500                               505                 510

30 Trp His Gly Asp Phe Thr Glu Gln Ser Gln Cys Met Lys Thr Lys Phe
    515                               520                 525

Trp Lys Thr Val Arg Tyr His Met Pro Pro Arg Arg Cys Arg Pro Phe
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35 Leu Arg Ser Thr Cys Arg Ser Thr His Leu Cys Thr Ala Pro Gln Ala
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Gln Asn

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ctt ttt gtg gca gca ggt aac tgt act gat gtc tat atg cac cat gag 96

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	Leu	Phe	Val	Ala	Gly	Asn	Cys	Thr	Asp	Val	Tyr	Met	His	His	Glu		
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	Met	Ile	Ser	Glu	Gly	Gln	Pro	Phe	Pro	Phe	Asn	Cys	Thr	Tyr	Pro	Pro	
			35					40				45					
10	gta	aca	aac	ggg	gca	gtg	aat	ctg	aca	tgg	cat	aga	aca	ccc	agt	aag	192
	Val	Thr	Asn	Gly	Ala	Val	Asn	Leu	Thr	Trp	His	Arg	Thr	Pro	Ser	Lys	
			50					55				60					
15	agc	cca	atc	tcc	atc	aac	aga	cac	gtt	aga	att	cac	cag	gac	cag	tcc	240
	Ser	Pro	Ile	Ser	Ile	Asn	Arg	His	Val	Arg	Ile	His	Gln	Asp	Gln	Ser	
			65				70					75				80	
20	tgg	att	ttg	ttt	ctt	ccg	ttg	gca	ttg	gag	gac	tca	ggc	atc	tat	caa	288
	Trp	Ile	Leu	Phe	Leu	Pro	Leu	Ala	Leu	Glu	Asp	Ser	Gly	Ile	Tyr	Gln	
					85					90					95		
25	tgt	gtt	ata	aag	gat	gcc	cac	agc	tgt	tac	cga	ata	gct	ata	aac	cta	336
	Cys	Val	Ile	Lys	Asp	Ala	His	Ser	Cys	Tyr	Arg	Ile	Ala	Ile	Asn	Leu	
				100					105					110			
30	acc	gtt	ttt	aga	aaa	cac	tgg	tgc	gac	tct	tcc	aac	gaa	gag	agt	tcc	384
	Thr	Val	Phe	Arg	Lys	His	Trp	Cys	Asp	Ser	Ser	Asn	Glu	Glu	Ser	Ser	
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	Ile	Asn	Ser	Ser	Asp	Glu	Tyr	Gln	Gln	Trp	Leu	Pro	Ile	Gly	Lys	Ser	
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40	ggc	agt	ctg	acg	tgc	cat	ctc	tac	ttc	cca	gag	agc	tgt	gtt	ttg	gat	480
	Gly	Ser	Leu	Thr	Cys	His	Leu	Tyr	Phe	Pro	Glu	Ser	Cys	Val	Leu	Asp	
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45	tca	ata	aag	tgg	tat	aag	ggt	tgt	gaa	gag	att	aaa	gtg	agc	aag	aag	528
	Ser	Ile	Lys	Trp	Tyr	Lys	Gly	Cys	Glu	Glu	Ile	Lys	Val	Ser	Lys	Lys	
					165				170						175		
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	Phe	Cys	Pro	Thr	Gly	Thr	Lys	Leu	Leu	Val	Asn	Asn	Ile	Asp	Val	Glu	
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55	gat	agt	ggg	agc	tat	gca	tgc	tca	gcc	aga	ctg	aca	cac	ttg	ggg	aga	624
	Asp	Ser	Gly	Ser	Tyr	Ala	Cys	Ser	Ala	Arg	Leu	Thr	His	Leu	Gly	Arg	
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10	acc aat ctg tct ctg agg aat cac att ctg tac aca gtg aac ata aca Thr Asn Leu Ser Leu Arg Asn His Ile Leu Tyr Thr Val Asn Ile Thr 290 295 300	912		
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75	tac agc acc atg ccc gag tcc att cag tac atc cga cag aag cac ggg Tyr Ser Thr Met Pro Glu Ser Ile Gln Tyr Ile Arg Gln Lys His Gly 500 505 510	1536		

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	Thr Lys Phe Trp Lys Lys Val Arg Tyr His Met Pro Pro Arg Arg Tyr	
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	Met Ile Ser Glu Gly Gln Pro Phe Pro Phe Asn Cys Thr Tyr Pro Pro	
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35	Val Thr Asn Gly Ala Val Asn Leu Thr Trp His Arg Thr Pro Ser Lys	
	50 55 60	
	Ser Pro Ile Ser Ile Asn Arg His Val Arg Ile His Gln Asp Gln Ser	
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45	Cys Val Ile Lys Asp Ala His Ser Cys Tyr Arg Ile Ala Ile Asn Leu	
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	Thr Val Phe Arg Lys His Trp Cys Asp Ser Ser Asn Glu Glu Ser Ser	
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	Gly Ser Leu Thr Cys His Leu Tyr Phe Pro Glu Ser Cys Val Leu Asp	
	145 150 155 160	
55	Ser Ile Lys Trp Tyr Lys Gly Cys Glu Glu Ile Lys Val Ser Lys Lys	
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Asp Ser Gly Ser Tyr Ala Cys Ser Ala Arg Leu Thr His Leu Gly Arg
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 5 Ile Phe Thr Val Arg Asn Tyr Ile Ala Val Asn Thr Lys Glu Val Gly
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 Ser Gly Gly Arg Ile Pro Asn Ile Thr Tyr Pro Lys Asn Asn Ser Ile
 225 230 235 240
 10 Glu Val Gln Leu Gly Ser Thr Leu Ile Val Asp Cys Asn Ile Thr Asp
 245 250 255
 Thr Lys Glu Asn Thr Asn Leu Arg Cys Trp Arg Val Asn Asn Thr Leu
 260 265 270
 15 Val Asp Asp Tyr Tyr Asn Asp Phe Lys Arg Ile Gln Glu Gly Ile Glu
 275 280 285
 Thr Asn Leu Ser Leu Arg Asn His Ile Leu Tyr Thr Val Asn Ile Thr
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 Phe Leu Glu Val Lys Met Glu Asp Tyr Gly His Pro Phe Thr Cys His
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 Phe Arg Ala Tyr Leu Ile Gly Gly Leu Met Ala Phe Leu Leu Leu Ala
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 30 Val Ser Ile Leu Tyr Ile Tyr Asn Thr Phe Lys Val Asp Ile Val Leu
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 Trp Tyr Arg Ser Thr Phe His Thr Ala Gln Ala Pro Asp Asp Glu Lys
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 385 390 395 400
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 45 Pro Gly Gln Ala Val Ala Ser Val Ile Asp Glu Asn Ile Lys Leu Cys
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 Arg Arg Leu Met Val Leu Val Ala Pro Glu Thr Ser Ser Phe Ser Phe
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 Tyr Ser Thr Met Pro Glu Ser Ile Gln Tyr Ile Arg Gln Lys His Gly
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